



PATENT APPLICATION

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re the application of: Shigeo Kittaka et al.

Attorney Docket No.: 2842.43US01

Application No.: 10/565,012

Confirmation No.: 5168

Filed: January 18, 2006

For: PHOTONIC CRYSTAL WAVEGUIDE, HOMOGENEOUS MEDIUM WAVEGUIDE,  
AND OPTICAL DEVICE

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INFORMATION DISCLOSURE STATEMENT

Mail Stop Amendment  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

Pursuant to 37 C.F.R. § 1.56, the attention of the Patent and Trademark Office is hereby directed to the references listed on the attached Form PTO-1449. It is respectfully requested that the information be expressly considered during the prosecution of this application, and that the references be made of record therein and appear among the "References Cited" on any patent to issue therefrom. The listing of a reference herein is not an admission that the reference is prior art or that the reference is material to patentability.

This Information Disclosure Statement is being filed before the mailing date of a first Office Action on the merits. No certification or fee is required.

The concise explanation of the relevance of the Japanese language foreign patent documents is included in the English language abstracts for the references and also as illustrated in the figures included therein. In addition, some of the Japanese language foreign patent documents were cited in a counterpart foreign application. An English language version of the International Search Report for the application (Application No. PCT/JP2004/010232) is attached hereto. Although Applicants do not acquiesce in the characterization of the references

in the attached foreign search report, a concise explanation of relevance of these references is provided by the International Search Report.

Two foreign language non-patent literature documents have also been listed and attached hereto. The concise explanation of relevance of "Symmetric Mach Zender all-optical switches and ultrafast all-optical signal processing" is included in an English language abstract appearing on the last page of the reference and as illustrated in the figures included therein. The concise explanation of relevance of "Photonic Crystal: Technology Applications" is disclosure of an optical delay line using a photonic crystal and as illustrated in the figures included therein. Applicants have no further explanation of relevance in their present possession and retain the right to obtain a translation of the foreign language references in the future if such action is deemed helpful to advance prosecution.

This application was filed after June 30, 2003; therefore, copies of cited U.S. patents and U.S. published applications are not included.

Respectfully submitted,



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Erik M. Drange



Substitute for form 1449/PTO

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**  
(Use as many sheets as necessary)

Complete if Known

Application Number	10/565,012
Filing Date	July 5, 2006
First Named Inventor	Shigeo Kittaka
Art Unit	2817
Examiner Name	Unknown
Attorney Docket Number	2842.43US01

1 of 2

**U.S. PATENT DOCUMENTS**

EXAMINER INITIAL*	Cite No. <sup>1</sup>	Document Number  Number-Kind Code <sup>2</sup> (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document
		US-2003/0142385 A1	07/31/2003	Kittaka et al.
		US-		
		US-		

**FOREIGN PATENT DOCUMENTS**

EXAMINER INITIAL*	Cite No. <sup>1</sup>	Foreign Patent Document  Country Code <sup>3</sup> Number <sup>4</sup> Kind Code <sup>5</sup> (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	T <sup>6</sup>
		JP 61-249004	11/06/1986	Imoto	X (abstract)
		JP 2001-108611	04/20/2001	Yanagi	X (abstract)
		JP 2001-174652	06/29/2001	Sakakibara	X (abstract)
		JP 2001-272555	10/05/2001	Noda	X (abstract)
		JP 2001-281480	10/10/2001	Yamada	X (abstract)
		JP 2001-305367	10/31/2001	Okada	X (abstract)
		JP 2001-343539	12/14/2001	Tomaru	X (abstract)
		JP 2002-169022	06/14/2002	Kikko	X (abstract)
		JP 2002-182026	06/26/2002	Kikko	X (abstract)
		JP 2002-236206	08/23/2002	Kikko	X (abstract)
		JP 2002-267845	09/18/2002	Kikko	X (abstract)
		JP 2002-303836	10/18/2002	Shirane	X (abstract)
		JP 2003-161971	06/06/2003	Flory	X (abstract)
		JP 2003-240934	08/27/2003	Kikko	X (abstract)
		JP 2003-287633	10/10/2003	Kikko	X (abstract)

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CONSIDERED

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup>Applicant's unique citation designation number (optional). <sup>2</sup>See Kinds Codes of USPTO Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 901.04. <sup>3</sup>Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup>For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup>Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. <sup>6</sup>Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450 Alexandria, VA 22313-1450.

Substitute for form 1449/PTO  <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b> <i>(Use as many sheets as necessary)</i>				<i>Complete if Known</i>	
				Application Number	10/565,012
				Filing Date	July 5, 2006
				First Named Inventor	Shigeo Kittaka
				Art Unit	2817
				Examiner Name	Unknown
Sheet	2	of	2	Attorney Docket Number	2842.43US01

**NON PATENT LITERATURE DOCUMENTS**

EXAMINER INITIAL*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	T <sup>2</sup>
		TAJIMA et al., "Symmetric Mach Zender all-optical switches and ultrafast all-optical signal processing," <u>Optronics</u> , Vol. 4, pp. 132-138 (2002).	X (abstract)
		"Photonic Crystal: Technology Applications," <u>CMC Publishing</u> , pp. 244-245 (2002).	

EXAMINER SIGNATURE	DATE CONSIDERED
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